

# UGRA

# Display Analysis & Certification Tool

# Report

## Basics

Date: 2011-3-25 01:33:33  
Report-Version: v1.3.1  
Monitor-Name: \\.\DISPLAY1  
Profile: C:/Windows/system32/spool/drivers/.../25.03.11-5800K-18-120cd-trc.icc  
Created: 2011-3-25 1:28  
Measurement device: eye-one pro

## Summary

The monitor has not passed the certification according to the UGRA DACT specifications.

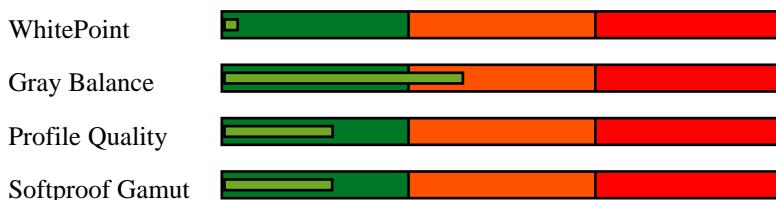
### Calibration

White Point	yes
Gray balance	no
Profile quality	yes

### Softproofing

MultiColor, HighBody	no
Offset/Gravure Paper Type 1/2	no
Offset on uncoated paper	no
Newspaper Printing	no
sRGB	no
AdobeRGB	no
ECI-RGB	no

### Diagram



## Whitepoint

The whitepoint should be as close as possible to the black body curve and the calibration target. The maximum allowed distance to the target whitepoint is DeltaE 2.0.

XYZ:	114.61 120.13 117.38
XYZ (normalized):	95.41 100.00 97.71
Luminance:	120.1 Cd/m2
Next Temperature:	5812 Kelvin
Assumed Target Whitepoint:	5800 Kelvin
Distance to assumed Target Whitepoint:	0.1 deltaE

## Blackpoint

The blackpoint is not defined in ISO 12646. Therefore UDACT does only measure but not assess it.

Luminance:	0.2 Cd/m2
Chromaticity:	2.6 Chroma (Lab)

## Gray balance

Average and maximum calculation will respect measurements with 1% minimum luminance only. The maximum allowed deviations to comply with this test are an average of DeltaC 1.0 and a range of DeltaC 2.0.

%	Kelvin	Cd/m2	L	Chroma	Gamma
0	18951	0.18	1.39	2.57	
5	6352	0.70	5.27	2.00	1.83
10	5983	2.08	13.99	0.72	1.82
15	5910	4.03	21.41	0.46	1.82
20	5875	6.66	28.23	0.33	1.82
25	5851	9.81	34.33	0.49	1.83
30	5828	13.93	40.56	0.92	1.81
35	5880	17.92	45.52	0.81	1.82
40	5771	22.97	50.83	0.39	1.82
45	5795	28.22	55.57	0.11	1.82
50	5813	34.58	60.59	0.40	1.81
55	5827	41.01	65.07	0.26	1.81
60	5807	48.25	69.59	0.30	1.80
65	5837	54.82	73.30	0.26	1.82
70	5772	62.90	77.50	0.50	1.83
75	5795	71.60	81.62	0.19	1.81
80	5797	81.03	85.73	0.54	1.78
85	5796	89.35	89.10	0.48	1.84
90	5790	99.19	92.82	0.22	1.83
95	5789	109.75	96.56	0.24	1.79
100	5812	120.13	100.00	0.00	
Average	5828			0.40	1.82
Range				1.67	
Max				0.92	

Tone values = 92.4%

Through the calibration of a display tone values can be lost. A display for the printing industry should show at least 95% of the incoming tone values.

## Profile Quality

This test displays and measures RGB values and compares them with the transformation of the profile. The maximum allowed deviations to comply with this test are an average of DeltaE 3.0 and a maximum of DeltaE 6.0.

The assumed chromatic adaptation is: Bradford

RGB	Lab	deltaLab	deltaE
0 0 0	1.4 0.8 -2.4	-1.4 -0.8 2.4	2.9
0 0 128	17.6 35.7 -69.2	-0.3 -0.0 -0.9	0.9
0 0 255	34.5 54.1 -106.2	-0.0 -0.2 0.2	0.3
0 128 0	51.4 -52.2 57.8	0.3 -0.4 2.2	2.3
0 128 128	54.2 -34.2 -9.6	0.1 0.2 -0.4	0.5
0 170 255	70.6 -23.2 -46.5	-0.2 0.5 -0.1	0.5
0 255 0	86.3 -79.6 91.1	0.0 0.1 -0.3	0.3
0 255 170	88.3 -65.1 20.8	0.0 0.3 -1.0	1.0
0 255 255	90.3 -51.6 -15.1	-0.0 0.3 -0.1	0.3
85 85 85	44.1 -0.2 0.1	-0.1 0.2 -0.1	0.3
128 0 0	31.2 52.2 39.5	-0.1 0.5 3.5	3.5
128 0 128	36.0 58.0 -39.1	0.1 -0.4 0.2	0.4
128 128 0	58.3 -8.8 65.9	0.2 -0.5 0.8	1.0
128 128 128	60.8 0.3 -0.0	-0.1 -0.3 0.0	0.3
128 128 255	65.8 17.6 -54.3	-0.3 0.2 -0.1	0.3
128 255 128	90.7 -47.7 43.9	-0.0 -0.4 -0.2	0.5
170 0 255	51.0 73.8 -78.7	0.1 -0.1 0.6	0.6
170 170 170	74.9 -0.1 0.3	0.0 0.1 -0.3	0.3
170 255 0	91.6 -41.7 96.5	0.0 -0.2 -0.7	0.7
170 255 255	95.2 -22.7 -7.5	-0.0 -0.0 -0.0	0.1
255 0 0	55.2 79.7 66.1	0.0 -0.0 -0.7	0.7
255 0 170	58.8 84.0 -24.7	0.2 -0.5 0.0	0.5
255 0 255	62.7 87.5 -59.3	0.1 -0.3 0.4	0.5
255 128 128	73.1 41.8 18.7	-0.0 -0.1 0.1	0.2
255 170 0	79.5 19.6 87.1	0.2 -0.4 -1.0	1.1
255 170 255	84.3 32.8 -24.4	-0.1 0.4 -0.1	0.4
255 255 0	96.6 -13.9 102.2	0.1 -0.2 -1.4	1.4
255 255 170	98.3 -6.9 35.1	0.1 -0.1 -0.3	0.4
255 255 255	100.0 0.0 0.0	0.0 0.0 -0.0	0.0
170 85 85	53.9 32.6 15.1	-0.1 0.2 -0.2	0.3
85 170 85	67.6 -38.1 34.6	-0.0 0.2 -0.3	0.3
85 85 170	47.8 13.8 -42.5	0.0 0.2 -0.4	0.4
85 170 170	69.7 -26.3 -7.8	-0.0 0.2 -0.5	0.5
170 85 170	56.7 39.7 -28.2	0.0 0.1 -0.3	0.3
170 170 85	73.1 -7.8 42.4	-0.0 0.1 -0.3	0.3
Average			0.7
Maximum			3.5

## Gamut-Volume

These measurements are only informative.

Gamut-Volume	
ISO	92 %
sRGB	97 %
AdobeRGB	76 %
ECI-RGB v1.0	72 %

# ISO-Gamut

This test displays and measures Lab values and compares them with the reference. The maximum allowed deviations to comply with this test are an average of DeltaE 4.0 and a minimum Gamut volume of 90% for ISOcoated.

Reference	Lab	deltaLab
55.0 -37.0 -50.0	58.4 -17.4 -43.6	20.9
66.9 -24.7 -37.1	66.8 -25.3 -36.5	0.8
79.7 -12.5 -21.8	79.9 -12.7 -21.1	0.7
48.0 74.0 -3.0	48.5 72.3 -1.9	2.1
60.8 50.6 -6.7	60.9 50.7 -6.8	0.2
76.4 25.8 -6.9	76.6 26.0 -6.6	0.4
89.0 -5.0 93.0	88.9 -4.6 94.0	1.1
90.3 -4.7 62.6	90.5 -4.8 63.1	0.6
92.2 -3.5 31.1	92.4 -3.4 31.7	0.5
53.1 37.7 28.9	53.3 37.2 29.2	0.7
41.5 22.7 16.8	41.7 22.2 16.9	0.6
31.9 40.0 24.0	32.2 39.2 23.5	0.9
32.5 44.4 -1.8	32.6 43.7 -1.3	0.9
51.3 1.3 44.5	51.0 1.4 44.7	0.3
34.6 -36.4 13.9	35.3 -33.3 14.9	3.4
36.0 -26.2 -20.9	37.4 -20.0 -17.9	7.0
20.9 9.6 -23.6	21.3 8.8 -23.5	0.9
89.0 0.0 -1.8	89.0 -0.5 -1.2	0.8
82.8 0.0 -1.7	82.8 -0.3 -1.4	0.4
69.3 0.0 -1.4	69.5 -0.5 -0.7	0.8
54.1 0.0 -1.0	53.9 0.3 -1.1	0.4
36.6 -0.0 -0.5	36.9 -0.1 -0.5	0.3
16.0 0.0 0.0	16.8 -0.4 0.3	1.0
24.0 22.0 -46.0	24.1 21.6 -45.4	0.8
40.9 17.9 -36.6	41.2 17.1 -35.6	1.3
63.7 10.3 -23.8	63.8 10.2 -23.4	0.3
47.0 68.0 48.0	47.0 68.1 48.2	0.2
58.5 47.1 37.9	58.7 47.0 37.6	0.4
74.2 22.9 21.4	74.2 23.5 21.7	0.6
50.0 -65.0 27.0	52.2 -47.5 30.3	18.0
62.1 -39.8 21.0	62.3 -40.1 21.6	0.7
77.0 -19.1 11.0	76.9 -18.9 10.8	0.3
71.2 18.8 17.3	71.1 19.0 17.0	0.3
71.2 22.2 73.1	71.1 22.6 74.0	1.0
47.7 71.2 16.2	47.7 71.3 15.9	0.4
38.0 55.4 -20.9	38.0 55.2 -20.2	0.8
73.7 -22.8 67.6	73.6 -22.7 68.0	0.5
52.3 -52.3 -20.2	55.0 -31.7 -15.4	21.4
43.3 -17.0 -48.6	44.8 -7.6 -45.1	10.2
95.0 0.0 -2.0	95.2 -0.5 -1.7	0.6
88.5 -0.4 -3.1	88.6 -1.1 -2.3	1.1
82.0 -0.9 -4.1	82.0 -1.1 -3.8	0.4
67.7 -2.0 -4.4	67.7 -2.0 -4.2	0.1
52.2 -2.5 -3.5	52.3 -3.1 -2.9	0.9
37.5 -3.9 -3.1	37.8 -4.7 -2.8	0.9
26.3 -6.8 -3.4	26.5 -7.1 -3.5	0.3
Average		2.3
Gamut-Volume		92 %

# Measurement Data

This table lists all RGB measurements. The XYZ values represent the values from the measurement device.

RGB	XYZ	RGB	XYZ
255 255 255	114.61 120.13 117.38	85 85 170	23.06 20.28 52.20
0 0 0	0.20 0.18 0.36	85 170 170	37.40 48.64 55.12
12 12 12	0.70 0.70 0.81	170 85 170	40.84 29.56 53.30
25 25 25	1.95 2.08 2.03	170 170 85	47.92 54.20 20.03
38 38 38	3.81 4.03 3.95	0 131 208	27.05 32.28 74.78
51 51 51	6.32 6.66 6.53	23 160 221	34.90 44.32 84.80
63 63 63	9.30 9.81 9.54	135 194 232	59.95 68.26 95.11
76 76 76	13.16 13.93 13.40	207 0 100	39.18 20.34 21.41
89 89 89	17.17 17.92 17.87	215 84 141	51.08 34.75 39.87
102 102 102	21.89 22.97 22.22	224 153 189	70.51 61.01 67.60
114 114 114	26.94 28.22 27.52	244 220 11	79.72 87.98 9.18
127 127 127	32.89 34.58 33.60	242 225 89	83.95 92.30 25.31
140 140 140	39.04 41.01 40.02	239 230 159	90.18 97.56 54.62
153 153 153	45.96 48.25 46.95	179 79 62	34.09 25.25 10.77
165 165 165	52.31 54.82 53.83	119 65 55	17.98 14.65 8.26
178 178 178	59.97 62.90 60.90	114 30 29	13.53 8.44 3.11
191 191 191	68.31 71.60 69.73	116 25 62	14.82 8.74 9.10
204 204 204	77.13 81.03 78.60	121 102 34	21.88 22.98 5.14
216 216 216	85.09 89.35 86.74	0 78 45	5.99 10.39 5.77
229 229 229	94.68 99.19 96.60	0 78 98	8.81 11.85 19.52
242 242 242	104.76 109.75 106.86	37 33 67	4.66 4.06 9.98
0 0 128	6.20 3.16 30.30	214 216 220	84.90 89.22 88.97
0 0 255	21.24 10.75 106.46	194 195 199	70.83 74.34 74.47
0 128 0	11.93 23.50 2.74	152 153 155	45.75 48.12 47.71
0 128 128	18.07 26.83 32.71	110 110 112	25.22 26.34 26.45
0 170 255	41.35 50.72 110.38	68 68 69	10.87 11.41 11.33
0 255 0	41.65 82.30 8.50	30 30 30	2.57 2.72 2.61
0 255 170	51.79 87.54 58.58	41 31 107	7.25 5.12 22.16
0 255 255	62.88 93.25 114.53	82 67 137	17.43 14.58 35.66
85 85 85	15.88 16.69 16.24	140 129 183	41.42 39.31 61.44
128 0 0	14.95 7.87 1.09	204 16 23	35.12 18.76 3.28
128 0 128	21.05 10.84 31.48	215 82 60	45.16 31.59 11.13
128 128 0	26.92 31.37 3.39	225 149 126	63.44 56.08 35.17
128 128 128	33.34 34.86 34.08	0 127 57	13.48 24.47 9.62
128 128 255	48.52 42.74 109.78	56 154 95	23.87 37.03 21.25
128 255 128	63.06 93.40 39.91	141 189 154	50.67 61.71 48.75
170 0 255	45.92 23.59 107.91	205 144 126	55.66 50.54 34.60
170 170 170	55.16 57.88 56.21	226 142 23	56.41 50.31 6.37
170 255 0	66.67 95.30 9.73	207 2 70	37.39 19.47 12.26
170 255 255	87.95 106.26 115.99	140 19 103	21.96 12.00 21.41
255 0 0	51.70 26.99 2.72	149 181 39	42.77 55.01 9.18
255 0 170	61.77 31.93 53.59	0 129 141	19.45 27.83 38.44
255 0 255	72.79 37.57 109.20	0 91 167	16.10 17.62 49.52
255 128 128	69.94 53.92 36.04	235 237 242	100.75 105.84 106.25
255 170 0	71.61 66.33 6.63	211 215 221	83.66 88.24 89.46
255 170 255	93.09 77.72 113.15	187 193 201	68.67 72.45 75.58
255 255 0	93.29 109.08 10.87	141 149 156	42.47 45.16 48.10
255 255 170	103.52 114.34 61.95	99 107 111	22.73 24.54 25.76
170 85 85	33.66 25.99 17.19	62 72 75	10.81 12.02 12.82
85 170 85	30.15 44.95 19.08	36 50 52	5.03 5.91 6.61